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PATENT TRADEMARK OFFICE

Patent

Case No.: 57278US002

1731

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

First Named Inventor: DAVIDSON, ROBERT S.
Application No.: 10/028025 Group Art Unit: Unknown
Filed: December 20, 2001 Examiner: Unknown
Title: CONTINUOUS PROCESS FOR CONTROLLED EVAPORATION OF BLACK LIQUOR

RECEIVED
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GROUP 1700INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
Washington, DC 20231

CERTIFICATE OF MAILING
I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to: Commissioner for Patents, Washington, DC 20231 on:

April 4, 2003

Date

Signed by

Douglas B. Little

Dear Sir:

Pursuant to 37 CFR §§ 1.56, 1.97, and 1.98, enclosed is a completed Form PTO-1449 citing references submitted for consideration by the Examiner. A copy of each cited reference is also enclosed. It is respectfully requested that the Examiner initial and return the enclosed Form PTO-1449 to indicate that each reference has been considered.

Under 37 CFR § 1.97(e)(1), I hereby certify that each item of information contained in this Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three (3) months prior to the filing of this Information Disclosure Statement.

Under 37 CFR § 1.704(d), I hereby state that each item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart application and that this communication was not received by any individual designated in 37 CFR § 1.56(c) more than thirty (30) days prior to the filing of this Information Disclosure Statement.

A copy of the Search Report from a foreign counterpart application is enclosed.

It is believed that no fee is due; however, in the event a fee is required, please charge the fee to Deposit Account No. 13-3723.

Respectfully submitted,

April 4, 2003
Date

By: Douglas B. Little
Douglas B. Little, Reg. No.: 28,439
Telephone No.: (651) 733-1501

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Office of Intellectual Property Counsel
3M Innovative Properties Company
Facsimile No.: 651-736-3833

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference 57278W0003		FOR FURTHER ACTION see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, Item 5 below.	
International application No. PCT/US 02/ 36172	International filing date (day/month/year) 12/11/2002	(Earliest) Priority Date (day/month/year) 20/12/2001	
Applicant 3M INNOVATIVE PROPERTIES COMPANY			

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 4 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

- a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

- b. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international search was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
☐ filed together with the international application in computer readable form.
☐ furnished subsequently to this Authority in written form.
☐ furnished subsequently to this Authority in computer readable form.
☐ the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
☐ the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

2. ☐ **Certain claims were found unsearchable** (See Box I).

3. ☐ **Unity of invention is lacking** (see Box II).

4. With regard to the **title**,

- ☒ the text is approved as submitted by the applicant.
☐ the text has been established by this Authority to read as follows:

5. With regard to the **abstract**,

- ☒ the text is approved as submitted by the applicant.
☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the **drawings** to be published with the abstract is Figure No.

- ☐ as suggested by the applicant.
☐ because the applicant failed to suggest a figure.
☐ because this figure better characterizes the invention.

☒ None of the figures.

INTERNATIONAL SEARCH REPORT

International Application No
PCT/US 02/36172A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 D21C11/10

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 D21C B01D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 3 638 708 A (FARIN WILLIAM G) 1 February 1972 (1972-02-01) claims 1-3; figures 1,2 ---	1-3
X	US 4 551 198 A (WILEY WILLIAM E) 5 November 1985 (1985-11-05) claims 1-9; figures 1-6 ---	1
X	US 5 143 579 A (FIELD JASPER H ET AL) 1 September 1992 (1992-09-01) claims 1-15; figure 1; examples 1,2 ---	1-3
Y	US 3 047 362 A (SMITH EDMOND L) 31 July 1962 (1962-07-31) claims 1-9; figure 2 ---	1
Y	---	1

-/--

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

T later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

X document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

Y document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

Z document member of the same patent family

Date of the actual completion of the international search

7 March 2003

Date of mailing of the international search report

25/03/2003

Name and mailing address of the ISA

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Authorized officer

Karlsson, L

INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 02/36172

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 5 868 805 A (NILSSON BENGT) 9 February 1999 (1999-02-09) claims 1-10; figure 1 ---	1
A	US 4 789 428 A (RYHAM ROLF) 6 December 1988 (1988-12-06) the whole document ---	1-3
A	US 5 984 987 A (KOHLE ARTHUR L) 16 November 1999 (1999-11-16) the whole document ---	1-3
A	GB 285 933 A (WILLIAM BARRS; EDWARD BARRS) 20 February 1928 (1928-02-20) the whole document ---	1-3
A	WO 00 28136 A (KVAERNER PULPING AKTIEBOLAG ; NYSTROEM PER (SE); SNEKKENES VIDAR (S) 18 May 2000 (2000-05-18) the whole document -----	1-3

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 02/36172

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 3638708	A	01-02-1972	NONE	
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Filing Date

December 20, 2001

First Named Inventor

Davidson, Robert S.

Art Unit

Unknown

Examiner Name

Unknown

Attorney Case Number

57278US002

(Use as many sheets as necessary)

Page 1 of 1

U.S. Patent Documents

Exam. Init.*	Cite No.	Document Number	Publication Date or Issue Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Doc. Number-(Kind Code if Known)			
	A1	US- 3,047,362	07/31/1962	Smith	
	A2	US- 3,638,708	02/01/1972	Farin	
	A3	US- 4,551,198	11/05/1985	Wiley	
	A4	US- 4,789,428	12/06/1988	Ryham	
	A5	US- 5,143,579	09/01/1992	Field et al.	
	A6	US- 5,868,805	02/09/1999	Nilsson	
	A7	US- 5,984,987	11/16/1999	Kohl	
	A8	US-			

Foreign Patent Documents

Exam. Init.*	Cite No.	Foreign Patent Document		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	Translation (Check if yes)
		Ctry. Code	Number-Kind Code (if known)				
	B1	GB	285,933	20-02-1928			
	B2	WO	00/28136	18-05-2000			
	B3						
	B4						
	B5						
	B6						
	B7						

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

Exam. Init.*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published
	C1	
	C2	
	C3	

*Examiner:

Date Considered:

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.